Federal Operating Permit Article 1

This permit is based upon the requirements of Title V of the Federal Clean Air Act and Chapter 80, Article 1 of the Commonwealth of Virginia Regulations for the Control and Abatement of Air Pollution. Until such time as this permit is reopened and revised, modified, revoked, terminated or expires, the permittee is authorized to operate in accordance with the terms and conditions contained herein. This permit is issued under the authority of Title 10.1, Chapter 13, §10.1-1322 of the Air Pollution Control Law of Virginia. This permit is issued consistent with the Administrative Process Act, and 9 VAC 5-80-50 through 9 VAC 5-80-300 of the State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution of the Commonwealth of Virginia.

Authorization to operate a Stationary Source of Air Pollution as described in this permit is hereby granted to:

Permittee Name: Dan River, Inc.

Facility Name: Dan River Inc. - Brookneal Plant

Facility Location: 813 Lynchburg Avenue

Brookneal, Virginia

Registration Number: 30378
Permit Number: VA-30378

December 26, 2001 Effective Date

July 25, 2005 Expiration Date

December 26, 2006 Expiration Date

Director, Department of Environmental Quality

July 25, 2005 Signature Date

Table of Contents, 2 pages Permit Conditions, 30 pages

Table of Contents

I.	Fac	ility Information	1
II.	Em	ission Units	2
	A.	Significant Emissions Units	2
	B.	Insignificant Emission Units	
III.	Fue	el Burning Equipment Requirements	4
	A.	3-Wickes 60 x 10 ⁶ (heat input) coal-fired boilers (Ref. Nos. 5.1-5.3)	4
	В.	Babcock and Wilcox Boiler (Reference No. 5.4)	
IV.	Pro	cess Equipment Requirements	9
	A.	General Requirements for Process Equipment	9
	В.	Greenville Machinery Bleach Ranges (Ref. Nos. 1.1 & 1.2)	
	C.	Bruckner Machinery Finishing Ranges (Ref. 2.1 & 2.2)	
	D.	Peter Zimmer Print Ranges (Ref. Nos. 4.2 & 4.3)	
	E.	Aztec Print Range (Ref. No. 4.4)	
	F.	Zimmer Flying Change Print Range (Ref. Nos. 4.1a and 4.5)	
	G.	Aeroglide Rotary Sludge Dryer (Ref. No. 6)	
V.	Fac	cility Wide Conditions	
	A.	Existing source standard for visible emissions	
	В.	New source standard for visible emissions	
	C.	Fugitive Dust Emission Standards	
	D.	Recordkeeping	
	E.	Startup, Shutdown and Malfunction	
VI.	Per	mit Shield & Inapplicable Requirements	
VII	Ger	neral Conditions	22
V 11.			
	A.	Enforceability	
	B.	Permit Expiration	
	C.	Recordkeeping and Reporting	
	D. E.	Annual Compliance Certification	
		Permit Deviation Reporting	
	F. G.	Failure/Malfunction Reporting Severability	
	Н.	Duty to Comply	
	п. I.	Need to Halt or Reduce Activity not a Defense	
	1. J.	Permit Action for Cause	
	J. K.	Property Rights	
	L.	Duty to Submit Information	
	L. М.	Duty to Pay Permit Fees.	
	N.	Alternative Operating Scenarios.	
	± 4.	1 mornaut to operating soonarios	

Operating Permit VA-30378 Page 2 of 2 July 25, 2005

O.	Inspection and Entry Requirements	27
P.	Reopening For Cause	
Q.	Permit Availability.	
Ř.	Transfer of Permits	
S.	Malfunction as an Affirmative Defense	
T.	Permit Revocation or Termination for Cause	
U.	Duty to Supplement or Correct Application	
V.	Stratospheric Ozone Protection	
W.	1	
X.	Changes to Permits for Emissions Trading	
	Emissions Trading	

Dan River, Inc Permit Number: VA-30378 Page 1 of 30 July 25, 2005

I. Facility Information

Permittee
Dan River, Inc.
P.O. Box 261
Danville, Virginia 24543

Responsible Official Greg R. Boozer Executive Vice President Manufacturing

Facility
Dan River Inc. - Brookneal Plant
813 Lynchburg Avenue
Brookneal, Virginia

Contact Person Ms. Patty W. Gann (434) 799-7389

County-Plant Identification Number: 51-031-0001

Facility Description: SIC Code 2261, NAICS Code - 313311 – This facility bleaches, finishes, and prints 100% cotton and cotton/polyester blends produced at off-site manufacturing plants. The facility includes a sewing plant located in a separate building located on contiguous property. The finished textiles are either made into sheet goods or shipped off-site for further processing.

Page 2 of 30 July 25, 2005

II. **Emission Units**

Equipment to be operated consists of:

A. Significant Emissions Units

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity* Pollution Control Device (PCD) Description		PCD ID	Pollutant Controlled	Applicable Permit Date	
FUEL BUI	RNING EQU		_					
5.1	1BH1	Wickes coal-fired boiler, Order #61118-1, 1948	60 x 10 ⁶ Btu/hr (heat input)	Zurn TA Collector (multicyclone)	ollector (multicyclone) # 5		N/A	
5.2	2BH1	Wickes coal-fired boiler, Order #61118-2, 1948	60 x 10 ⁶ Btu/hr (heat input)	Zurn TA Collector (multicyclone)	# 5	PM, PM-10	N/A	
5.3	3BH1	Wickes coal-fired boiler, Order #61118-3, 1948	60 x 10 ⁶ Btu/hr (heat input)	Zurn TA Collector (multicyclone)	# 5	PM, PM-10	N/A	
5.4	4BH1	Babcock and Wilcox natural gas-fired boiler, 1968	91 x 10 ⁶ Btu/hr (heat input)				N/A	
BLEACH	<u>RANGES – </u>	which include a 12.2 x 10° Btu	hr natural gas/liquefied	petroleum gas (LPG)-fired Menze	l fabric sing	er, each	_	
1.1	2BR01	Greenville Machinery, 1984	12,000 yd/hr or 11,452 lb _{fabric} /hr				N/A	
1.2	3BR01	Greenville Machinery, 1984	12,000 yd/hr or 11,452 lb _{fabric} /hr				N/A	
FINISHIN	G RANGES	5 — which include a natural gas	s/liquefied petroleum gas	s (LPG)-fired 14.6 x 10 ⁶ Btu/hr drye	er, each			
2.1	2FR01- 2FR05	Bruckner Machinery, 1984	9,600 yd/hr or 9,162 lb _{fabric} /hr 9,600 yd/hr or				N/A	
2.2	3FR01- 3FR03	Bruckner Machinery, 1984	9,162 lb _{fabric} /hr				N/A	
PERMITT	ED PRINTI	NG RANGE – which includes	a 18.0 x 10° natural gas	liquefied petroleum gas (LPG)-fire	d dryer/cur	ing oven		
4.1a	1PR1- 1PR3	Zimmer Flying Change, 2003	6,540 yd/hr or 8,589 lb _{fabric} /hr				7/10/2003, as amended on 6/23/2004	
NON-PER	MITTED P	RINTING RANGES – which i	nclude a 12.0 x 10 ⁶ natur	ral gas/liquefied petroleum gas (LP	G)-fired dry	er/curing oven,	each	
4.2	2PR1, 2PR2, 2PR4	Peter Zimmer, 1974	9,000 yd/hr or 8,589 lb _{fabric} /hr				N/A	
4.3	3PR1, 3PR2, 3PR3	Peter Zimmer, 1974	9,000 yd/hr or 8,589 lb _{fabric} /hr				N/A	
PERMITT	ED PRINTI	NG RANGES – which include	e a 8.0 x 10 ⁶ natural gas/	liquefied petroleum gas (LPG)-fire	d dryer/curi	ng oven, each		
No. 4.4	4.91	Aztec SN AZ-97-1435, 1998	3,438 yd/hr or 3,281 lb _{fabric} /hr				8/30/2001	
No. 4.5	4.92	Zimmer Flying Change, 1999	9,000 yd/hr or 8,589 lb _{fabric} /hr				8/30/2001	
SLUDGE I	DRYER – w	hich includes a 4.3 x 10 ⁶ natur	al gas/liquefied petroleu	m gas (LPG)-fired burner				
No. 6	SD1	Aeroglide Rotary Sludge Dryer, Model #R1-60-30, 1992	4,170 lb/hr	Aeroglide cyclone and Sly wet impinger scrubber, connected in series	PC3	PM, PM-10,	12/23/1991, as amended on 12/1/1993	

The Size/Rated capacity and PCD efficiency is provided for informational purposes only, and is not an applicable requirement.

> Page 3 of 30 July 25, 2005

B. Insignificant Emission Units

The following emission units at the facility are identified in the application as insignificant emission units under 9 VAC 5-80-720:

Emission Unit No.	Emission Unit Description	Citation 9 VAC 5-	Pollutant(s) Emitted (9 VAC 5-80-720 B)	Rated Capacity (9 VAC 5-80-720 C)
	Quality Control Laboratory	720 (A) (18)	PM-10, VOC	N/A
	Hercules liquefied petroleum gas (LPG)-fired emergency generator	720 (C) (4)	NO _x PM-10, CO	67 Hp
	Detroit Diesel fire pump	720 (C) (4)	SO ₂ , NO _x , PM-10, CO	170 Hp
3.3	Environmental Air Systems natural gas/LPG-fired space heater	720 (A) (4)	NO _x , CO	\leq 4.5 x 10 ⁶ Btu/hr
4.3	Environmental Air Systems natural gas/LPG-fired space heater	720 (A) (4)	NO _x , CO	\leq 4.5 x 10 ⁶ Btu/hr
4.6	Environmental Air Systems natural gas/LPG-fired space heater	720 (A) (4)	NO _x , CO	\leq 4.5 x 10 ⁶ Btu/hr
4.9	GFNCO natural gas/LPG-fired space heater	720 (A) (4)	NO _x , CO	$\leq 0.4 \times 10^6 \text{Btu/hr}$
4.10	Environmental Air Systems natural gas/LPG-fired space heater	720 (A) (4)	NO _x , CO	\leq 4.5 x 10 ⁶ Btu/hr
	Print screen making, storage, and maintenance	720 (B)	VOC	≤ 5 ton/yr
	Sheet and pillowcase fabrication	720 (B)	PM-10, PM	≤ 5 ton/yr
	Warehouse and storage of finished fabric	720 (B)	PM-10, PM	≤ 5 ton/yr
T1	30,000 gallon liquefied petroleum gas (LPG)storage tank	720 (B) (2)	VOC	≤ 5 ton/yr
T2	30,000 gallon liquefied petroleum gas (LPG)storage tank	720 (B) (2)	VOC	≤ 5 ton/yr
Т3	30,000 gallon liquefied petroleum gas (LPG)storage tank	720 (B) (2)	VOC	≤ 5 ton/yr
T4	30,000 gallon liquefied petroleum gas (LPG)storage tank	720 (B) (2)	VOC	≤ 5 ton/yr
T5	500 gallon liquefied petroleum gas (LPG)storage tank	720 (B) (2)	VOC	≤ 5 ton/yr
T6	120 gallon liquefied petroleum gas (LPG)storage tank	720 (B) (2)	VOC	≤ 5 ton/yr
T7	550-gallon diesel fuel storage tank	720 (A) (25)	VOC	$\leq 40 \text{ m}^3$
Т8	250-gallon diesel fuel storage tank	720 (A) (25)	VOC	$\leq 40 \text{ m}^3$
Т9	1,000-gallon gasoline storage tank	720 (A) (25)	VOC	$\leq 40 \text{ m}^3$
T12	6,000-gallon Permafresh Resin TGB storage tank	720 (B)(2)	VOC	≤ 5 ton/yr
T13	6,000-gallon Permafresh Resin TGB storage tank	720 (B)(2)	VOC	$\leq 5 \text{ ton/yr}$
T14	10,000-gallon waste oil storage tank	720 (B)(2)	VOC	≤ 5 ton/yr
T15	5,000-gallon No. 2 fuel oil storage tank	720 (B)(2)	VOC	≤ 5 ton/yr
PVA-R	PVA recovery system	720 (C)(2)	NO_x , CO	\leq 3.2 x 10^6 Btu/hr

These emission units are presumed to be in compliance with all requirements of the federal Clean Air Act as may apply. Based on this presumption, no monitoring, recordkeeping, or reporting shall be required for these emission units in accordance with 9 VAC 5-80-110.

Permit Number: VA-30378 Page 4 of 30 July 25, 2005

III. Fuel Burning Equipment Requirements

Table III.A.1

Unit	Reference/	PM-10 note l			SO ₂ note 2			
ID	Condition No.	lb/10 ⁶ Btu	lb/hr	ton/yr	lb/10 ⁶ Btu	lb/hr	ton/yr	
5.1	Reference A	0.294	17.65	N/A	1.357	162.9	N/A	
5.2	Reference A	0.294	17.65	N/A			N/A	
5.3	Reference A	0.294	17.65	N/A			N/A	
5.4	Reference A	0.178	16.16	N/A	0.0006		N/A	

Reference A 9 VAC-5-40-900 and DAPC letter dated February 11, 1980

Note 1 PM=PM-10

Note 2 In order to prevent an exceedance of the 3-hr SO₂ NAAQS, the three coal-fired Wickes and natural gas-fired Babcock and Wilcox boilers cannot exceed 165.3 lb/hr.

A. 3-Wickes 60 x 10⁶ (heat input) coal-fired boilers (Ref. Nos. 5.1-5.3)

1. Limitations

- a. Particulate emissions from the each of the Wickes boilers (Ref. Nos. 5.1-5.3) shall be controlled by the use of a multicyclone. The multicyclones shall be provided with adequate access for inspection. An annual inspection shall be conducted on the multicyclones by the permittee to insure structural integrity. (9 VAC 5-80-110)
- b. The approved fuel for the Wickes boilers (Ref. Nos. 5.1-5.3) is bituminous coal. A change in the fuel may require a permit to modify and operate. (9 VAC 5-80-110)
- c. In order to comply with the national ambient air quality standard (NAAQS) for sulfur dioxide (SO₂), the maximum hourly SO₂ emissions shall be less than 162.9 pounds per hour from the three Wickes boilers, total. The permittee shall utilize the following operating limits:
 - (i) Only two of the three Wickes boilers may be operated concurrently.
 - (ii) The maximum sulfur content of the coal to be burned in the boilers shall not exceed 0.9 percent by weight per shipment.
 - (iii) The minimum heat content of the coal shall not be less than 12,600 Btu/lb (per shipment).

(9 VAC 5-80-110, 9 VAC 5-40-930, and 9 VAC 5-40-20)

d. Visible Emissions from each of the Wickes boilers' (Ref. Nos. 5.1-5.3) exhaust stacks (Ref. Nos. 1BH1, 2BH1, & 3BH1) shall not exceed 20 percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 60 percent opacity.

(9 VAC 5-40-80 and 9 VAC 5-40-940)

Permit Number: VA-30378

Page 5 of 30 July 25, 2005

- e. The permittee shall take the following measures in order to minimize the duration and frequency of excess emissions, with respect to each Wickes boiler (Ref. Nos. 5.1-5.3) and its associated multicyclone which affect such emissions:
 - (i) Develop a maintenance schedule and maintain records of all scheduled and non-scheduled maintenance for the Wickes boilers (Ref. Nos. 5.1-5.3) and multicyclone.
 - (ii) Have available written operating procedures for the Wickes boilers (Ref. Nos. 5.1-5.3) and multicyclone. These procedures shall be based on the manufacturer's recommendations, at minimum, if such recommendations exist.
 - (iii) At all times, including periods of startup, shutdown, soot blowing and malfunction, owners shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with air pollution control practices for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the board, which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

(9 VAC 5-80-110 E and 9 VAC 5-40-20 E)

2. Periodic Monitoring

At least one time per calendar week, an observation of the presence of visible emissions from each of the Wickes boilers' (Ref. Nos. 5.1-5.3) stacks (Ref. Nos. 1BH1, 2BH1, & 3BH1) shall be made. If visible emissions are observed the permittee shall:

- a. take timely corrective action such that the boiler(s) (Ref. Nos. 5.1-5.3) resumes operation with no visible emissions, or,
- b. perform a visible emission evaluation (VEE) in accordance with 40 CFR 60, Appendix A, Method 9 to assure visible emissions from the boiler stack(s) (Ref. Nos. 1BH1, 2BH1, & 3BH1) do not exceed 20 percent opacity. The VEE shall be conducted for a minimum of six minutes. If any of the 15-second observations exceed 20 percent, the VEE shall be conducted for a total of 60 minutes. If compliance is not demonstrated by this VEE, timely corrective action shall be taken such that the boiler(s) (Ref. Nos. 5.1-5.3) resumes operation with visible emissions of 20 percent or less.

> Page 6 of 30 July 25, 2005

c. The permittee shall maintain a boiler observation log to demonstrate compliance. The log shall include the date and time of the observations, whether or not there were visible emissions, any VEE recordings and any necessary corrective action. If the boiler(s) has not been operated during the week, it shall be noted in the boiler log book and that a visual observation was not required.

- (i) (9 VAC 5-80-110 E.)
- d. At a frequency not to exceed five years, the permittee shall conduct a stack test for PM and concurrent visible emission examination (Ref. 40 CFR 60, Appendix A, Method 5 and Method 9) from one (1) of the three Wickes boilers (Ref. Nos. 5.1-5.3) to demonstrate compliance with the pound per million Btu (heat input) emission limit contained in Table III.A.1 of this permit. The initial test shall be performed within 180 days after the effective date of this permit. The test shall be conducted and reported and data reduced as set forth in 9 VAC 5-40-30. The details of the tests shall be arranged with the South Central Regional Office. The permittee shall submit a test protocol at least 30 days prior to testing. Two copies of the test results shall be submitted to the South Central Regional Office within 60 days after test completion and shall conform to the test report format enclosed with this permit.

(9 VAC 5-50-30 and 9 VAC 5-80-1200)

3. Recordkeeping

The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content of and format of such records shall be arranged with the South Central Regional Office. These records shall include, but are not limited to:

- a. The sulfur content for each shipment of coal.
- b. The average Btu content for each shipment of coal.
- c. Written daily records of boiler (Ref. Nos. 5.1-5.3) use, demonstrating compliance to the limitations in Condition No. III.A.1.c(i).
- d. Visual emission observation reports for each boiler (Ref. Nos. 5.1-5.3).
- e. Records of malfunctions of equipment which may cause a violation of any part of this permit.
- f. Operating procedures, maintenance schedules, training, service records for the boiler(s) (Ref. Nos. 5.1-5.3).

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years. (9 VAC 5-80-110)

4. Reporting

The permittee shall submit written reports in accordance with General Condition VII.C.

(9 VAC 5-80-110 F)

Permit Number: VA-30378 Page 7 of 30

July 25, 2005

B. Babcock and Wilcox Boiler (Reference No. 5.4)

1. Limitations

- a. The approved fuel for the Babcock and Wilcox boiler (Reference No. 5.4) is natural gas. A change in fuel may require a permit to modify and operate. (9 VAC 5-80-110)
- b. Visible emissions from the Babcock and Wilcox boiler's (Reference No. 5.4) exhaust stack (Ref. No. 4BH1) shall not exceed twenty (20) percent opacity, except during one (1) six (6) minute period per hour in which visible emissions shall not exceed sixty (60) percent opacity as determined by EPA Method 9 (reference 40 CFR 60 Appendix A). (9 VAC 5-40-80 and 9 VAC 5-40-940)
- c. The permittee shall take the following measures in order to minimize the duration and frequency of excess emissions, with respect to the Babcock and Wilcox boiler (Reference No. 5.4) which affect such emissions:
 - (i) Develop a maintenance schedule and maintain records of all scheduled and non-scheduled maintenance for the Babcock and Wilcox boiler (Reference No. 5.4).
 - (ii) Have available written operating procedures for the Babcock and Wilcox boiler (Reference No. 5.4). These procedures shall be based on the manufacturer's recommendations, at minimum, if such recommendations exist.
 - (iii) At all times, including periods of startup, shutdown, soot blowing and malfunction, owners shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with air pollution control practices for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the board, which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

(9 VAC 5-80-110 E and 9 VAC 5-40-20 E)

2. Periodic Monitoring

At least one time per calendar week, an observation of the presence of visible emissions from the Babcock and Wilcox boiler's (Reference No. 5.4) stack (Ref. No. 4BH1) shall be made. If visible emissions are observed the permittee shall:

a. Take timely corrective action such that the boiler (Reference No. 5.4) resumes operation with no visible emissions, or,

> Page 8 of 30 July 25, 2005

b. Perform a visible emission evaluation (VEE) in accordance with 40 CFR 60, Appendix A, Method 9 to assure visible emissions from the boiler stack (Ref. No. 4BH1) do not exceed 20 percent opacity. The VEE shall be conducted for a minimum of six minutes. If any of the 15-second observations exceed 20 percent, the VEE shall be conducted for a total of 60 minutes. If compliance is not demonstrated by this VEE, timely corrective action shall be taken such that the boiler (Reference No. 5.4) resumes operation with visible emissions of 20 percent or less.

c. The permittee shall maintain a boiler (Reference No. 5.4) observation log to demonstrate compliance. The log shall include the date and time of the observations, whether or not there were visible emissions, any VEE recordings and any necessary corrective action. If the boiler (Reference No. 5.4) has not been operated during the week, it shall be noted in the boiler log book and that a visual observation was not required.

(9 VAC 5-80-110 E)

3. Recordkeeping

The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content of and format of such records shall be arranged with the South Central Regional Office. These records shall include, but are not limited to:

- a. Visual emission observation reports for the boiler (Reference No. 5.4).
- b. Records of malfunctions of equipment which may cause a violation of any part of this permit.
- c. Operating procedures, maintenance schedules, and service records for the Babcock and Wilcox boiler (Reference No. 5.4).

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years. (9 VAC 5-40-50)

4. Reporting

The permittee shall submit written reports in accordance with General Condition VII.C.

(9 VAC 5-80-110 F)

Page 9 of 30

July 25, 2005

IV. Process Equipment Requirements

Table IV.1 Process Equipment Emission Limits

Unit ID	Reference/ Condition No.	PM-10 note 1		VOC		SO_2
		Lb/hr	ton/	lb/hr	ton/yr	$1b/10^{6}$
			yr			Btu
1.1	Reference A	13.27				2.64
1.2	Reference A	13.27				2.64
2.1	Reference A	11.37				2.64
2.2	Reference A	11.37				2.64
No. 4.1a	Reference C	0.00047	9.9	46.2	38.9	
		lb / yard				
4.2	Reference A	10.89				2.64
4.3	Reference A	10.89				2.64
No. 4.4	Permit dated August 30, 2001			26.9	38.5	
No. 4.5	Permit dated August 30, 2001			68.2	39.0	
No. 6	Reference B	0.4	1.4			

Reference A 9 VAC 5 Chapter 40 Article 4 of State Regulations

Reference B Permit dated December 23, 1991, as amended on December 1, 1993 and December 6, 1993

Reference C Permit dated July 10, 2003 as amended June 23, 2004, and 9 VAC 5-50-260

Note 1 PM=PM-10

A. General Requirements for Process Equipment

 The permittee shall comply with all applicable requirements of the Printing, Coating and Dyeing of Fabrics and Other Textiles MACT, 40 CFR 63, Subpart OOOO, by the compliance date of May 29, 2006.
 (9 VAC 5-60-95, 9 VAC 5-60-100, 9 VAC 5-80-110 and 40 CFR 63 Subpart OOOO)

B. Greenville Machinery Bleach Ranges (Ref. Nos. 1.1 & 1.2)

1 Limitations

- a. The visible emissions from the bleach ranges' (Ref. Nos. 1.1 & 1.2) stacks (Ref. Nos. 2BR01 & 3BR01) shall not exceed twenty (20) percent opacity, except during one (1) six (6) minute period per hour in which visible emissions shall not exceed thirty (30) percent opacity as determined by EPA Method 9 (reference 40 CFR 60 Appendix A).
- b. The approved fuels for the bleach ranges (Ref. Nos. 1.1 & 1.2) are natural gas and LPG. A change in fuel may require a permit to modify and operate. (9 VAC 5-50-80)
- c. The permittee shall take the following measures in order to minimize the duration and frequency of excess emissions; with respect to the bleach ranges (Ref. Nos. 1.1 & 1.2) develop a maintenance schedule and maintain records of all scheduled and non-scheduled maintenance for the bleach ranges. (9 VAC 5-80-110 K, 9 VAC 5-80-110 F, 9 VAC 5-170-160)

Page 10 of 30 July 25, 2005

2. Periodic Monitoring

At least one time per calendar week, an observation of the presence of visible emissions from each of the bleach ranges' (Ref. Nos. 1.1 & 1.2) stacks (Ref. 2BR01 & 3BR01) shall be made. If visible emissions are observed the permittee shall:

- a. take timely corrective action such that the bleach ranges (Ref. Nos. 1.1 & 1.2) resumes operation with no visible emissions, or,
- b. perform a visible emission evaluation (VEE) in accordance with 40 CFR 60, Appendix A, Method 9 to assure visible emissions from the bleach ranges' (Ref. Nos. 1.1 & 1.2) stacks (Ref. Nos. 2BR01 & 3BR01) do not exceed 20 percent opacity. The VEE shall be conducted for a minimum of six minutes. If any of the 15-second observations exceed 20 percent, the VEE shall be conducted for a total of 60 minutes. If compliance is not demonstrated by this VEE, timely corrective action shall be taken such that the bleach range resumes operation with visible emissions of 20 percent or less.
- c. The permittee shall maintain a visual observation log for each of the bleach ranges (Ref. Nos. 1.1 & 1.2) to demonstrate compliance. The log shall include the date and time of the observations, whether or not there were visible emissions, any VEE recordings and any necessary corrective action.

(9 VAC 5-80-110 E)

3. Recordkeeping

The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content of and format of such records shall be arranged with the South Central Regional Office. These records shall include, but not limited to:

- a. Visual emission observation reports.
- b. Records of malfunctions of equipment which may cause a violation of any part of this permit.
- c. Operating procedures, maintenance schedules, and service records for the bleach ranges (Ref. Nos. 1.1 & 1.2).

These records shall be maintained on site and be made available upon request by the permittee for the most current five year period. (9 VAC 5-50-50)

4. Reporting

The permittee shall submit written reports in accordance with General Condition No.VII.C (9 VAC 5-80-110 F)

Page 11 of 30 July 25, 2005

C. Bruckner Machinery Finishing Ranges (Ref. 2.1 & 2.2)

1. Limitations

- a. The visible emissions from the finishing ranges' (Ref. 2.1 & 2.2) stacks (Ref. Nos. 2FR01-2FR03 & 3FR01-3FR03) shall not exceed twenty (20) percent opacity, except during one (1) six (6) minute period per hour in which visible emissions shall not exceed thirty (30) percent opacity as determined by EPA Method 9 (reference 40 CFR 60 Appendix A).
- b. The approved fuels for the finishing ranges (Ref. 2.1 & 2.2) are natural gas and LPG. A change in fuel may require a permit to modify and operate. (9 VAC 5-50-80)
- c. The permittee shall take the following measures in order to minimize the duration and frequency of excess emissions; with respect to the finishing ranges (Ref. 2.1 & 2.2) develop a maintenance schedule and maintain records of all scheduled and non-scheduled maintenance for the finishing ranges.

(9 VAC 5-80-110 K and 9 VAC 5-80-110 F)

2. Periodic Monitoring

At least one time per calendar week, an observation of the presence of visible emissions from each of the finishing ranges' (Ref. 2.1 & 2.2) stacks (Ref. Nos. 2FR01-2FR03 & 3FR01-3FR03) shall be made. If visible emissions are observed the permittee shall:

- a. take timely corrective action such that the finishing ranges (Ref. 2.1 & 2.2) resumes operation with no visible emissions, or,
- b. perform a visible emission evaluation (VEE) in accordance with 40 CFR 60, Appendix A, Method 9 to assure visible emissions from the finishing ranges' (Ref. 2.1 & 2.2) stacks (Ref. Nos. 2FR01-2FR03 & 3FR01-3FR03) do not exceed 20 percent opacity. The VEE shall be conducted for a minimum of six minutes. If any of the 15-second observations exceed 20 percent, the VEE shall be conducted for a total of 60 minutes. If compliance is not demonstrated by this VEE, timely corrective action shall be taken such that the finishing range(s) resumes operation with visible emissions of 20 percent or less.
- c. The permittee shall maintain a visual observation log for each of the finishing ranges (Ref. 2.1 & 2.2) to demonstrate compliance. The log shall include the date and time of the observations, whether or not there were visible emissions, any VEE recordings and any necessary corrective action.

(9 VAC 5-80-110 E)

3. Recordkeeping

The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content of and format of

Page 12 of 30 July 25, 2005

such records shall be arranged with the South Central Regional Office. These records shall include, but not limited to:

- a. Visual emission observation reports.
- b. Records of malfunctions of equipment which may cause a violation of any part of this permit.
- c. Operating procedures, maintenance schedules, and service records for the finishing ranges.

These records shall be maintained on site and be made available upon request by the permittee for the most current five year period. (9 VAC 5-50-50)

4. Reporting

The permittee shall submit written reports in accordance with General Condition No. VII.C. (9 VAC 5-80-110 F)

D. Peter Zimmer Print Ranges (Ref. Nos. 4.2 & 4.3)

1. Limitations

- a. The visible emissions from the print ranges' (Ref. Nos. 4.2 & 4.3) stacks (Ref. Nos. 2PR1, 2PR2, 2PR4, & 3PR1-3PR3) shall not exceed twenty (20) percent opacity, except during one (1) six (6) minute period per hour in which visible emissions shall not exceed thirty (30) percent opacity as determined by EPA Method 9 (reference 40 CFR 60 Appendix A).
- b. The permittee shall take the following measures in order to minimize the duration and frequency of excess emissions; with respect to the print ranges develop a maintenance schedule and maintain records of all scheduled and nonscheduled maintenance for the print ranges.

(9 VAC 5-80-110 and 9 VAC 5-80-110 F)

2. Periodic Monitoring

At least one time per calendar week, an observation of the presence of visible emissions from each of the print ranges' (Ref. Nos. 4.2 & 4.3) stacks (Ref. Nos. 2PR1, 2 PR2, 2PR4, & 3PR1-3PR3) shall be made. If visible emissions are observed the permittee shall:

- a. take timely corrective action such that the print ranges (Ref. Nos. 4.2 & 4.3) resumes operation with no visible emissions, or,
- b. perform a visible emission evaluation (VEE) in accordance with 40 CFR 60, Appendix A, Method 9 to assure visible emissions from the print ranges (Ref. Nos. 4.2 & 4.3) stacks (Ref. Nos. 2PR1, 2 PR2, 2PR4, & 3PR1-3PR3) do not exceed 20 percent opacity. The VEE shall be conducted for a minimum of six minutes. If any of the 15-second observations exceed 20 percent, the VEE shall be conducted for a total of 60 minutes. If compliance is not demonstrated by

Page 13 of 30 July 25, 2005

this VEE, timely corrective action shall be taken such that the print range resumes operation with visible emissions of 20 percent or less.

c. The permittee shall maintain a visual observation log for each print range (Ref. Nos. 4.2 & 4.3) to demonstrate compliance. The log shall include the date and time of the observations, whether or not there were visible emissions, any VEE recordings and any necessary corrective action.

(9 VAC 5-80-110 E)

3. Recordkeeping

The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content of and format of such records shall be arranged with the South Central Regional Office. These records shall include, but not limited to:

- a. Visual emission observation reports.
- b. Records of malfunctions of equipment which may cause a violation of any part of this permit.
- c. Operating procedures, maintenance schedules, and service records for the print ranges.

These records shall be maintained on site and be made available upon request by the permittee for the most current five year period. (9 VAC 5-50-50)

4. Reporting

The permittee shall submit written reports in accordance with General Condition No. VII. C. (9 VAC 5-80-110 F)

E. Aztec Print Range (Ref. No. 4.4)

1. Limitations

- a. The visible emissions from the print range (Ref. No. 4.4) stacks (Ref 4.91) shall not exceed 10 percent opacity as determined by EPA Method 9 (reference 40 CFR 60 Appendix A), except during periods of startup, shutdown, or malfunction.
 - (9 VAC 5-50-260 and 9 VAC 5-50-20, Condition No. 5 of permit dated August 30, 2001)
- b. The approved fuels for the print range (Ref. No. 4.4) are natural gas and LPG. A change in fuel may require a permit to modify and operate.
 (9 VAC 5-80-110 E)
- c. The permittee shall take the following measures in order to minimize the duration and frequency of excess emissions; with respect to the print range (Ref. No. 4.4) develop a maintenance schedule and maintain records of all scheduled and non-scheduled maintenance for the print range.

 (9 VAC 5-80-110, Condition #11 of permit dated August 30, 2000)

Permit Number: VA-30378

Page 14 of 30 July 25, 2005

2. Testing

The permitted facility shall be constructed so as to allow for emissions testing at any time using appropriate methods. Upon request from the Department, test ports shall be provided at the appropriate locations. (9 VAC 5-50-30)

3. Periodic Monitoring

At least one time per week, an observation of the presence of visible emissions from each of the print range's (Ref. No. 4.4) stacks (Ref. 4.91) shall be made. If visible emissions are observed the permittee shall:

- a. take timely corrective action such that the print range (Ref. No. 4.4) resumes operation with no visible emissions, or,
- b. perform a visible emission evaluation (VEE) in accordance with 40 CFR 60, Appendix A, Method 9 to assure visible emissions from the print range's (Ref. No. 4.4) stacks (Ref. No. 4.91) do not exceed 10 percent opacity. The VEE shall be conducted for a minimum of six minutes. If any of the 15-second observations exceed 10 percent, the VEE shall be conducted for a total of 60 minutes. If compliance is not demonstrated by this VEE, timely corrective action shall be taken such that the print range resumes operation with visible emissions of 10 percent or less.
- c. The permittee shall maintain a visual observation log for the print range's (Ref. No. 4.4) stacks (Ref. No. 4.91) to demonstrate compliance. The log shall include the date and time of the observations, whether or not there were visible emissions, any VEE recordings and any necessary corrective action.

(9 VAC 5-80-110 E)

4. Recordkeeping

The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content of and format of such records shall be arranged with the South Central Regional Office. These records shall include, but not limited to:

- a. The annual VOC emissions, calculated monthly as the sum of each consecutive 12 month period, from the print range to demonstrate compliance with the emission limits in Table IV.1. These emissions shall be calculated using a material balance on the amount of chemical(s) consumed, taking into account the volatile species present in the chemical(s), the percent volatile by weight of the chemical(s), as stated in the Certified Product Data Sheet or equivalent reference and assuming 100% evaporation of all volatile species.
- b. Visual emission observation reports.
- c. Records of malfunctions of equipment which may cause a violation of any part of this permit.
- d. Operating procedures, maintenance schedules, operator training, and service records for the print range.

Permit Number: VA-30378

Page 15 of 30 July 25, 2005

These records shall be maintained on site and be made available upon request by the permittee for the most current five year period.

(9 VAC 5-50-50, Conditions #7 and #11 of permit dated August 30, 2001)

5. **Reporting**

The permittee shall submit written reports in accordance with General Condition No. VII.C.

(9 VAC 5-80-110 F)

F. Zimmer Flying Change Print Range (Ref. Nos. 4.1a and 4.5)

1. Limitations

- a. Throughput of cloth through the print range (Ref. No. 4.1a) shall not exceed 42,048,000 yards per year, calculated monthly as the sum of each consecutive 12 month period.
 - (9 VAC 5-80-110, Condition No. 5 of permit dated July 10, 2003, as amended on June 23, 2004)
- b. The visible emissions from each of the print ranges' stacks shall not exceed the following:
 - (i) From the print range (Ref. No. 4.5) stacks (Ref No. 4.92), visible emissions shall not exceed 10 percent opacity as determined by EPA Method 9 (reference 40 CFR 60 Appendix A), except during periods of startup, shutdown, or malfunction.
 - (9 VAC 5-50-260 and 9 VAC 5-50-20, Condition No. 6 of permit dated August 30, 2001)
 - (ii) From the print range (Ref. No. 4.1a) stacks (Ref Nos. 1PR1-1PR4), visible emissions shall not exceed 20 percent opacity as determined by EPA Method 9 (reference 40 CFR 60 Appendix A), except for one six minute period in any one hour not to exceed 30 percent.
 - (9 VAC 5-80-110, 9 VAC 5-50-80)
- c. The approved fuels for the print ranges (Ref. Nos. 4.1a, 4.5) are natural gas and LPG. A change in fuel may require a permit to modify and operate.
 (9 VAC 5-80-110 E, Condition 2 of permit dated July 10, 2003, as amended on June 23, 2004)
- d. The permittee shall take the following measures in order to minimize the duration and frequency of excess emissions; with respect to the print ranges (Ref. Nos. 4.1a, 4.5) develop a maintenance schedule and maintain records of all scheduled and non-scheduled maintenance for each print range.

 (9 VAC 5-170-160, Condition #11 of permit dated August 30, 2001, Condition #12 of permit dated July 10, 2003, as amended on June 23, 2004)

2. Testing

The permitted facility shall be constructed so as to allow for emissions testing at any time using appropriate methods. Upon request from the Department, test ports shall be provided at the appropriate locations.

(9 VAC 5-50-30, Condition #3 of permit dated July 10, 2003, as amended on June 23, 2004)

Page 16 of 30 July 25, 2005

3. Periodic Monitoring

At least one time per calendar week, an observation of the presence of visible emissions from each of the print ranges' (Ref. Nos. 4.1a, 4.5) stacks (Ref. Nos. 1PR1-1PR4, 4.92) shall be made. If visible emissions are observed the permittee shall:

- a. take timely corrective action such that the respective print range (Ref. No. 4.1a or 4.5) resumes operation with no visible emissions, or,
- b. perform a visible emission evaluation (VEE) in accordance with 40 CFR 60, Appendix A, Method 9 to assure visible emissions are acceptable as follows:
 - (i) For the print range's (Ref. No. 4.5) stacks (Ref. No. 4.92), that they do not exceed 10 percent opacity. The VEE shall be conducted for a minimum of six minutes. If any of the 15-second observations exceed 10 percent, the VEE shall be conducted for a total of 60 minutes. If compliance is not demonstrated by this VEE, timely corrective action shall be taken such that the print range resumes operation with visible emissions of 10 percent or less.
 - (ii) For the print range's (Ref. No. 4.1a) stacks (Ref. Nos. 1PR1-1PR4), that they do not exceed 20 percent opacity. The VEE shall be conducted for a minimum of six minutes. If any of the 15-second observations exceed 20 percent, the VEE shall be conducted for a total of 60 minutes. If compliance is not demonstrated by this VEE, timely corrective action shall be taken such that the print range resumes operation with visible emissions of 20 percent or less.
- c. The permittee shall maintain a visual observation log for the print ranges' (Ref. Nos. 4.1a, 4.5) stacks (Ref. Nos. 1PR1-1PR4, 4.92) to demonstrate compliance. The log shall include the date and time of the observations, whether or not there were visible emissions, any VEE recordings and any necessary corrective action.

(9 VAC 5-80-110 E)

4. Recordkeeping

The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content of and format of such records shall be arranged with the South Central Regional Office. These records shall include, but not limited to:

a. The annual VOC emissions, calculated monthly as the sum of each consecutive 12 month period, from each print range (Ref. Nos. 4.1a, 4.5) to demonstrate compliance with the emission limits in Table IV.1. These emissions shall be calculated using a material balance on the amount of chemical(s) consumed, taking into account the volatile species present in the chemical(s), the percent volatile by weight of the chemical(s)), as stated in the Certified Product Data Sheet or equivalent reference, and assuming 100% evaporation of all volatile species

Page 17 of 30 July 25, 2005

- b. Throughput of cloth processed on the print range (Ref. No. 4.1a), calculated monthly as the sum of each consecutive 12 month period.
- c. Visual emission observation reports.
- d. Records of malfunctions of equipment which may cause a violation of any part of this permit.
- e. Operating procedures, maintenance schedules, operator training, and service records for the print range (Ref. No. 4.5).

These records shall be maintained on site and be made available upon request by the permittee for the most current five year period.

(9 VAC 5-50-50, Conditions #7 and #11 of permit dated August 30, 2001, Conditions #8 and #12 of permit dated July 10, 2003, as amended on June 23, 2004)

5. Reporting

The permittee shall submit written reports in accordance with General Condition No. VII.C.

(9 VAC 5-80-110 F)

G. Aeroglide Rotary Sludge Dryer (Ref. No. 6)

1. General Requirements for Aeroglide Rotary Sludge Dryer (Ref. No. 6)

a. Except where this permit is more restrictive than the applicable requirement, the sludge dryer shall be operated in compliance with the requirements of 40 CFR 61, Subpart E.

(9 VAC 5-60-65, 9 VAC 5-60-70, 9 VAC 5-80-110 and 40 CFR 61 Subpart E)

2. Limitations

- a. The approved fuel for the Aeroglide sludge dryer (Ref. No. 6) is natural gas. A change in fuel may require a permit to modify and operate.
 (9 VAC 5-80-110, Condition #14 of permit dated December 23, 1991, as amended on December 1, 1993)
- b. Particulate emissions from the Aeroglide sludge dryer (Ref. No. 6) shall be controlled by an Aeroglide cyclone in series with a Sly wet impinger scrubber. The cyclone and scrubber shall be provided with adequate access for inspection. (9 VAC 5-80-110, and Condition No. 3 of the permit dated December 23, 1991, as amended on December 1, 1993)
- c. The Aeroglide sludge dryer (Ref. No. 6) shall not operate more than 7,200 hours per year, calculated monthly as the sum of each consecutive twelve month period.
 - (9 VAC 5-80-110, and Condition No. 4 of the permit dated December 23, 1991, as amended on December 1, 1993)
- d. Visible emissions from the Aeroglide sludge dryer's (Ref. No. 6) stack (Ref. No. SD1) shall not exceed 10% opacity as determined by EPA Method 9 (reference

Page 18 of 30 July 25, 2005

40 CFR 60 Appendix A), except during periods of startup, shutdown, or malfunction.

(9 VAC 5-80-110, and Condition No. 10 of the permit dated December 23, 1991, as amended on December 1, 1993)

- e. Only sludge produced by the permittee at the Brookneal facility shall be dried in the Aeroglide sludge dryer (Ref. No. 6). (9 VAC 5-80-110, and Condition No. 5 of the permit dated December 23, 1991, as amended on December 1, 1993)
- f. The maximum exit air temperature from the Aeroglide sludge dryer (Ref. No. 6) shall be 300E F.
 (9 VAC 5-80-110, and Condition No. 6 of the permit dated December 23, 1991, as amended on December 1, 1993)
- g. The permittee shall train operators in the proper operation of the Aeroglide sludge dryer (Ref. No. 6) air pollution control equipment and familiarize the operators with the written operating procedures. The permittee shall maintain records of the training provided including the names of trainees, the date of training and the nature of the training.

 (9 VAC 5-80-110, and Condition No. 15 of the permit dated December 23, 1991, as amended on December 1, 1993)
- h. The permittee shall take the following measures in order to minimize the duration and frequency of excess emissions; with respect to the Aeroglide sludge dryer (Ref. No. 6) air pollution control equipment develop a maintenance schedule and maintain records of all scheduled and non-scheduled maintenance for the Aeroglide sludge dryer air pollution control equipment.
 (9 VAC 5-80-110, and Condition No. 15 of the permit dated December 23, 1991, as amended on December 1, 1993)
- The permittee shall maintain an inventory of spare parts for air pollution control equipment that are needed to minimize duration of equipment breakdowns which could affect excess emissions (9 VAC 5-80-110)
- j. No changes shall be made in the operation which would potentially increase emissions above the level determined by the most recent test (stack or sludge sampling), until the new emission level has been estimated by calculation and the results reported to the South Central Regional Office.

 (9 VAC 5-80-110, 40 CFR 61.53 and 40 CFR 61.54)

3. Monitoring

a. The scrubber shall be equipped with a flow meter and a device to continuously measure the differential pressure through the scrubber. The permittee shall record the flowmeter and differential pressure once per day in a log book.

Permit Number: VA-30378

Page 19 of 30 July 25, 2005

b. The Aeroglide sludge dryer (Ref. No. 6) shall be equipped with a device to continuously measure and display the exit air temperature. The permittee shall record the exit air temperature once per day in a log book.

(9 VAC 5-80-110 and Condition Nos. 6 and 7 of the permit dated December 23, 1991, as amended on December 1, 1993)

4. Testing

The permitted facility shall be constructed so as to allow for emissions testing at any time using appropriate methods. Upon request from the Department, test ports shall be provided at the appropriate locations.

(9 VAC 5-50-30 and Condition No. 11 of the permit dated December 23, 1991, as amended on December 1, 1993)

5. Periodic Monitoring

At least one time per calendar week, an observation of the presence of visible emissions from each of the Aeroglide sludge dryer's (Ref. No. 6) stack (Ref. No. SD1) shall be made. If visible emissions are observed the permittee shall:

- a. take timely corrective action such that the Aeroglide sludge dryer (Ref. No. 6) resumes operation with no visible emissions, or,
- b. perform a visible emission evaluation (VEE) in accordance with 40 CFR 60, Appendix A, Method 9 to assure visible emissions from the Aeroglide sludge dryer's (Ref. No. 6) stack (Ref. No. SD1) do not exceed 10 percent opacity. The VEE shall be conducted for a minimum of six minutes. If any of the 15-second observations exceed 10 percent, the VEE shall be conducted for a total of 60 minutes. If compliance is not demonstrated by this VEE, timely corrective action shall be taken such that the sludge dryer (Ref. No. 6) resumes operation with visible emissions of 10 percent or less.
- c. The permittee shall maintain a visual observation log for the Aeroglide sludge dryer (Ref. No. 6) to demonstrate compliance. The log shall include the date and time of the observations, whether or not there were visible emissions, any VEE recordings and any necessary corrective action.

(9 VAC 5-80-110 E)

6. Recordkeeping

The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the South Central Regional Office. These records shall include, but are not limited to:

- a. Annual hours of operation of the Aeroglide sludge dryer (Ref. No. 6), calculated monthly as the sum of each consecutive 12 month period, to demonstrate compliance with the limits in Condition No. IV.G.2.c
- b. Visual emission observation reports.
- c. Daily log of scrubber liquid flow and differential pressure drop readings.
- d. Daily log of dryer exit air temperature reading.

Permit Number: VA-30378

Page 20 of 30 July 25, 2005

- e. Records of malfunctions of equipment which may cause a violation of any part of this permit.
- f. Operating procedures, maintenance schedules, training, and service records for the Aeroglide sludge dryer (Ref. No. 6).
- g. Stack or sludge sampling test records and any associated calculations to indicate compliance with emissions limit set forth in 40 CFR 61.52 and 40 CFR 61.55. (40 CFR 61.53 and 40 CFR 61.54)

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years. (9 VAC 5-50-50, 9 VAC 5-80-110, and Condition Nos. 15, 16, and 17 of the permit dated December 23, 1991, as amended on December 1, 1993)

7. **Reporting**

The permittee shall submit written reports in accordance with General Condition No. VII.C. (9 VAC 5-80-110 F)

V. Facility Wide Conditions

A. Existing source standard for visible emissions

Unless otherwise specified in this part, no owner or other person shall cause or permit to be discharged into the atmosphere from any affected facility (constructed, modified or relocated prior to March 17, 1972, or reconstructed prior to December 10, 1976) any visible emissions which exhibit greater than 20% opacity, except for one six-minute period in any one hour of not more than 60% opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). Failure to meet the requirements of this section because of the presence of water vapor shall not be a violation of this section. (9 VAC 5-40-80 and 9 VAC 5-80-110)

B. New source standard for visible emissions

Unless otherwise specified in this part, on or after the date on which the performance test required to be conducted by 9 VAC 5-50-30 is completed, no owner or other person shall cause or permit to be discharged into the atmosphere from any affected facility (constructed, modified or relocated after March 17, 1972, or reconstructed on or after December 10, 1976) any visible emissions which exhibit greater than 20% opacity, except for one six-minute period in any one hour of not more than 30% opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). Failure to meet the requirements of this section because of the presence of water vapor shall not be a violation of this section. (9 VAC 5-50-80 and 9 VAC 5-80-110)

C. Fugitive Dust Emission Standards

During the operation of a stationary source or any other building, structure, facility or installation, no owner or other person shall cause or permit any materials or property to be handled, transported, stored, used, constructed, altered, repaired or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne. Such reasonable precautions may include, but are not limited, to the following:

1. Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads or the clearing of land;

> Page 21 of 30 July 25, 2005

2. Application of asphalt, water, or suitable chemicals on dirt roads, materials stockpiles and other surfaces which may create airborne dust; the paving of roadways and maintaining them in a clean condition;

- 3. Installation and use of hoods, fans and fabric filters to enclose and vent the handling of dusty materials. Adequate containment methods shall be employed during sandblasting or other similar operations;
- 4. Open equipment for conveying or transporting materials likely to create objectionable air pollution when airborne shall be covered, or treated in an equally effective manner at all times when in motion; and
- 5. The prompt removal of spilled or tracked dirt or other materials from paved streets and of dried sediments resulting from soil erosion.

(9 VAC 5-40-90, 9 VAC 5-50-90, and 9 VAC 5-80-110)

D. Recordkeeping

The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the South Central Regional Office. These records shall include, but are not limited to:

- 1. Calendar year log of coal consumption, the F-factor, pollutant-specific emission factors, and emission equations for the Wickes boilers (Ref. Nos. 5.1-5.3).
- 2. Calendar year log of natural gas consumption, the F-factor for the Babcock and Wilcox boiler (Ref. No. 5.4), pollutant-specific emission factors, and emission equations.
- 3. Calendar year log of liquefied petroleum gas (LPG) consumption, pollutant-specific emission factors, and emission equations.
- 4. Calendar year mass balance to calculate particulate matter (PM) and volatile organic compound (VOC) emissions from the bleach ranges (Ref. Nos. 1.1, 1.2). These emissions shall be calculated using a material balance. The permittee will keep records of the equations, certified product data sheets or equivalent references, emission equations, and all supporting documentation.
- 5. Calendar year mass balance to calculate volatile organic compound (VOC) emissions from the finishing ranges (Ref. Nos. 2.1, 2.2). These emissions shall be calculated using a material balance. The permittee will keep records of the equations, certified product data sheets or equivalent references, emission equations, and all supporting documentation.
- 6. Calendar year mass balance to calculate volatile organic compound (VOC) emissions from the non-permitted print ranges (Ref. Nos. 4.1, 4.2, 4.3). These emissions shall be calculated using a material balance. The permittee will keep

> Page 22 of 30 July 25, 2005

records of the equations, certified product data sheets or equivalent references, emission equations, and all supporting documentation.

The logs shall be kept on site and be made available upon request. These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5)

(9 VAC 5-80-110 F)

E. Startup, Shutdown and Malfunction

At all times, including periods of startup, shutdown, soot blowing and malfunction, owners shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with air pollution control practices for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the board, which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

(9 VAC 5-40-20, 9 VAC 5-50-20, and 9 VAC 5-80-110)

VI. Permit Shield & Inapplicable Requirements

Compliance with the provisions of this permit shall be deemed compliance with all applicable requirements in effect as of the permit issuance date as identified in this permit. Nothing in this permit shield shall alter the provisions of §303 of the federal Clean Air Act, including the authority of the administrator under that section, the liability of the owner for any violation of applicable requirements prior to or at the time of permit issuance, or the ability to obtain information by the administrator pursuant to (i) §114 of the federal Clean Air Act, (ii) the Board pursuant to §10.1-1314 or §10.1-1315 of the Virginia Air Pollution Control Law or (iii) the Department pursuant to §10.1-1307.3 of the Virginia Air Pollution Control Law. (9 VAC 5-80-140)

VII. General Conditions

A. Enforceability

All terms and conditions in this permit are enforceable by the administrator and citizens under the federal Clean Air Act, except those that have been designated as only stateenforceable.

(9 VAC 5-80-110 N)

B. Permit Expiration

This permit has a fixed term of five years. The expiration date shall be the date five years from the date of issuance. Unless the owner submits a timely and complete application for renewal to the Department consistent with the requirements of 9 VAC 5-80-80, the right of the facility to operate shall be terminated upon permit expiration.

- 1. The owner shall submit an application for renewal at least six months but no earlier than eighteen months prior to the date of permit expiration.
- 2. If an applicant submits a timely and complete application for an initial permit or renewal under this section, the failure of the source to have a permit or the operation of the source without a permit shall not be a violation of Article 1, Part II of 9 VAC

> Page 23 of 30 July 25, 2005

5 Chapter 80, until the Board takes final action on the application under 9 VAC 5-80-150.

- 3. No source shall operate after the time that it is required to submit a timely and complete application under subsections C and D of 9 VAC 5-80-80 for a renewal permit, except in compliance with a permit issued under Article 1, Part II of 9 VAC 5 Chapter 80.
- 4. If an applicant submits a timely and complete application under section 9 VAC 5-80-80 for a permit renewal but the Board fails to issue or deny the renewal permit before the end of the term of the previous permit, (i) the previous permit shall not expire until the renewal permit has been issued or denied and (ii) all the terms and conditions of the previous permit, including any permit shield granted pursuant to 9 VAC 5-80-140, shall remain in effect from the date the application is determined to be complete until the renewal permit is issued or denied.
- 5. The protection under subsections F 1 and F 5 (ii) of section 9 VAC 5-80-80 F shall cease to apply if, subsequent to the completeness determination made pursuant section 9 VAC 5-80-80 D, the applicant fails to submit by the deadline specified in writing by the Board any additional information identified as being needed to process the application.

(9 VAC 5-80-80 B, C and F, 9 VAC 5-80-110 D and 9 VAC 5-80-170 B)

C. Recordkeeping and Reporting

- 1. All records of monitoring information maintained to demonstrate compliance with the terms and conditions of this permit shall contain, where applicable, the following:
 - a. The date, place as defined in the permit, and time of sampling or measurements.
 - b. The date(s) analyses were performed.
 - c. The company or entity that performed the analyses.
 - d. The analytical techniques or methods used.
 - e. The results of such analyses.
 - f. The operating conditions existing at the time of sampling or measurement.

(9 VAC 5-80-110 F)

2. Records of all monitoring data and support information shall be retained for at least five years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation,

> Page 24 of 30 July 25, 2005

and copies of all reports required by the permit. (9 VAC 5-80-110 F)

- 3. The permittee shall submit the results of monitoring contained in any applicable requirement to DEQ every six months. The time periods to be addressed are the calendar months January through June and July through December. Each report must be postmarked within 30 days following each six-month reporting period. This report must be signed by a responsible official, consistent with 9 VAC 5-80-80 G, and shall include:
 - a. The time period included in the report.
 - b. All deviations from permit requirements. For purposes of this permit, deviations include, but are not limited to:
 - (i) Exceedance of emissions limitations or operational restrictions;
 - (ii) Excursions from control device operating parameter requirements, as documented by continuous emission monitoring, periodic monitoring, or compliance assurance monitoring which indicates an exceedance of emission limitations or operational restrictions; or,
 - (iii) Failure to meet monitoring, recordkeeping, or reporting requirements contained in this permit.
 - c. If there were no deviations from permit requirements during the time period, the permittee shall include a statement in the report that "no deviations from permit requirements occurred during this semiannual reporting period."

(9 VAC 5-80-110 F)

D. Annual Compliance Certification

Exclusive of any reporting required to assure compliance with the terms and conditions of this permit or as part of a schedule of compliance contained in this permit, the permittee shall submit to DEQ and EPA a certification of compliance with all terms and conditions of this permit including emission limitation standards or work practices. The time period to be covered by the certification is the calendar months January through December. Each report must be postmarked within 30 days following each annual period. The compliance certification shall comply with such additional requirements that may be specified pursuant to §114(a)(3) and §504(b) of the federal Clean Air Act. This certification shall be signed by a responsible official, consistent with 9 VAC 5-80-80 G, and shall include:

- 1. The time period included in the certification.
- 2. The identification of each term or condition of the permit that is the basis of the certification.
- 3. The compliance status.
- 4. Whether compliance was continuous or intermittent, and if not continuous, documentation of each incident of non-compliance.

> Page 25 of 30 July 25, 2005

- 5. Consistent with subsection 9 VAC 5-80-110 E, the method or methods used for determining the compliance status of the source at the time of certification and over the reporting period.
- 6. Such other facts as the permit may require to determine the compliance status of the source.

One copy of the annual compliance certification shall be sent to EPA at the following address:

Clean Air Act Title V Compliance Certification (3AP00) U. S. Environmental Protection Agency, Region III 1650 Arch Street Philadelphia, PA 19103-2029.

(9 VAC 5-80-110 K.5)

E. Permit Deviation Reporting

The permittee shall notify the South Central Regional Office, within four daytime business hours after discovery of any deviations from permit requirements which may cause excess emissions for more than one hour, including those attributable to upset conditions as may be defined in this permit. In addition, within 14 days of the discovery, the permittee shall provide a written statement explaining the problem, any corrective actions or preventative measures taken, and the estimated duration of the permit deviation. The occurrence should also be reported in the next semi-annual compliance monitoring report pursuant to General Condition C.3 above of this permit.

(9 VAC 5-80-110 F.2 and 9 VAC 5-80-250)

F. Failure/Malfunction Reporting

In the event that any affected facility or related air pollution control equipment fails or malfunctions in such a manner that may cause excess emissions for more than one hour, the owner shall, as soon as practicable but no later than four daytime business hours after the malfunction is discovered, notify the South Central Regional Office by facsimile transmission, telephone or telegraph of such failure or malfunction and shall within 14 days of discovery provide a written statement giving all pertinent facts, including the estimated duration of the breakdown. Owners subject to the requirements of 9 VAC 5-40-50 C and 9 VAC 5-50-50 C are not required to provide the written statement prescribed in this paragraph for facilities subject to the monitoring requirements of 9 VAC 5-40-40 and 9 VAC 5-50-40. When the condition causing the failure or malfunction has been corrected and the equipment is again in operation, the owner shall notify the South Central Regional Office.

(9 VAC 5-20-180 C)

G. Severability

The terms of this permit are severable. If any condition, requirement or portion of the permit is held invalid or inapplicable under any circumstance, such invalidity or inapplicability shall not affect or impair the remaining conditions, requirements, or portions of the permit.

(9 VAC 5-80-110 G.1)

Permit Number: VA-30378

Page 26 of 30 July 25, 2005

H. Duty to Comply

The permittee shall comply with all terms and conditions of this permit, including those terms and conditions set forth in a tabular format. Any permit noncompliance constitutes a violation of the federal Clean Air Act or the Virginia Air Pollution Control Law or both and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or, for denial of a permit renewal application. (9 VAC 5-80-110 G.2)

I. Need to Halt or Reduce Activity not a Defense

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

(9 VAC 5-80-110 G.3)

J. Permit Action for Cause

A physical change in, or change in the method of operation of, this stationary source may be subject to permitting under State Regulations 9 VAC 5-80-50, 9 VAC 5-80-1100, 9 VAC 5-80-1790, or 9 VAC 5-80-2000 and may require a permit modification and/or revisions except as may be authorized in any approved alternative operating scenarios. (9 VAC 5-80-190 and 9 VAC 5-80-260)

K. Property Rights

The permit does not convey any property rights of any sort, or any exclusive privilege. (9 VAC 5-80-110 G.5)

L. Duty to Submit Information

- 1. The permittee shall furnish to the Board, within a reasonable time, any information that the Board may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Board copies of records required to be kept by the permit and, for information claimed to be confidential, the permittee shall furnish such records to the Board along with a claim of confidentiality. (9 VAC 5-80-110 G.6)
- 2. Any document (including reports) required in a permit condition to be submitted to the Board shall contain a certification by a responsible official that meets the requirements of 9 VAC 5-80-80 G. (9 VAC 5-80-110 K.1)

M. Duty to Pay Permit Fees

The owner of any source for which a permit under 9 VAC 5-80-50 through 9 VAC 5-80-300 was issued shall pay permit fees consistent with the requirements of 9 VAC 5-80-310 through 9 VAC 5-80-350. The actual emissions covered by the permit program fees for the preceding year shall be calculated by the owner and submitted to the Department by <u>April 15</u> of each year. The calculations and final amount of emissions are subject to verification and final determination by the Department.

(9 VAC 5-80-110 H and 9 VAC 5-80-340 C)

> Page 27 of 30 July 25, 2005

N. Alternative Operating Scenarios

Contemporaneously with making a change between reasonably anticipated operating scenarios identified in this permit, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating. The permit shield described in 9 VAC 5-80-140 shall extend to all terms and conditions under each such operating scenario. The terms and conditions of each such alternative scenario shall meet all applicable requirements including the requirements of 9 VAC 5 Chapter 80, Article 1. (9 VAC 5-80-110 J)

O. Inspection and Entry Requirements

The permittee shall allow DEQ, upon presentation of credentials and other documents as may be required by law, to perform the following:

- 1. Enter upon the premises where the source is located or emissions-related activity is conducted, or where records must be kept under the terms and conditions of the permit.
- 2. Have access to and copy, at reasonable times, any records that must be kept under the terms and conditions of the permit.
- 3. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit.
- 4. Sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.

(9 VAC 5-80-110 K.2)

P. Reopening For Cause

The permit shall be reopened by the Board if additional federal requirements become applicable to a major source with a remaining permit term of three years or more. Such reopening shall be completed no later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 9 VAC 5-80-80 F.

- 1. The permit shall be reopened if the Board or the administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
- 2. The permit shall be reopened if the administrator or the Board determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
- 3. The permit shall not be reopened by the Board if additional applicable state requirements become applicable to a major source prior to the expiration date established under 9 VAC 5-80-110 D.

Page 28 of 30 July 25, 2005

Q. Permit Availability

Within five days after receipt of the issued permit, the permittee shall maintain the permit on the premises for which the permit has been issued and shall make the permit immediately available to DEQ upon request.

(9 VAC 5-80-150 E)

R. Transfer of Permits

- 1. No person shall transfer a permit from one location to another, unless authorized under 9 VAC 5-80-130, or from one piece of equipment to another. (9 VAC 5-80-160)
- 2. In the case of a transfer of ownership of a stationary source, the new owner shall comply with any current permit issued to the previous owner. The new owner shall notify the Board of the change in ownership within 30 days of the transfer and shall comply with the requirements of 9 VAC 5-80-200. (9 VAC 5-80-160)
- 3. In the case of a name change of a stationary source, the owner shall comply with any current permit issued under the previous source name. The owner shall notify the Board of the change in source name within 30 days of the name change and shall comply with the requirements of 9 VAC 5-80-200. (9 VAC 5-80-160)

S. Malfunction as an Affirmative Defense

- 1. A malfunction constitutes an affirmative defense to an action brought for noncompliance with technology-based emission limitations if the requirements of paragraph 2 of this condition are met.
- 2. The affirmative defense of malfunction shall be demonstrated by the permittee through properly signed, contemporaneous operating logs, or other relevant evidence that show the following:
 - a. A malfunction occurred and the permittee can identify the cause or causes of the malfunction.
 - b. The permitted facility was at the time being properly operated.
 - c. During the period of malfunction, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit.
 - d. The permittee notified the board of the malfunction within two working days following the time when the emission limitations were exceeded due to the malfunction. This notification shall include a description of the malfunction, any steps taken to mitigate emissions, and corrective actions taken. The notification may be delivered either orally or in writing. The notification may be delivered by electronic mail, facsimile transmission, telephone, or any other method that allows the permittee to comply with the deadline. This notification

Permit Number: VA-30378

Page 29 of 30 July 25, 2005

fulfills the requirements of 9 VAC 5-80-110 F 2 b to report promptly deviations from permit requirements. This notification does not release the permittee from the malfunction reporting requirement under 9 VAC 5-20-180 C.

- 3. In any enforcement proceeding, the permittee seeking to establish the occurrence of a malfunction shall have the burden of proof.
- 4. The provisions of this section are in addition to any malfunction, emergency or upset provision contained in any applicable requirement.

(9 VAC 5-80-250)

T. Permit Revocation or Termination for Cause

A permit may be revoked or terminated prior to its expiration date if the owner knowingly makes material misstatements in the permit application or any amendments thereto or if the permittee violates, fails, neglects or refuses to comply with the terms or conditions of the permit, any applicable requirements, or the applicable provisions of 9 VAC 5 Chapter 80 Article 1. The Board may suspend, under such conditions and for such period of time as the Board may prescribe, any permit for any of the grounds for revocation or termination or for any other violations of these regulations.

(9 VAC 5-80-190 C and 9 VAC 5-80-260)

U. Duty to Supplement or Correct Application

Any applicant who fails to submit any relevant facts or who has submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrections. An applicant shall also provide additional information as necessary to address any requirements that become applicable to the source after the date a complete application was filed but prior to release of a draft permit.

(9 VAC 5-80-80 E)

V. Stratospheric Ozone Protection

If the permittee handles or emits one or more Class I or II substances subject to a standard promulgated under or established by Title VI (Stratospheric Ozone Protection) of the federal Clean Air Act, the permittee shall comply with all applicable sections of 40 CFR Part 82, Subparts A to F.

(40 CFR Part 82, Subparts A-F)

W. Accidental Release Prevention

If the permittee has more, or will have more than a threshold quantity of a regulated substance in a process, as determined by 40 CFR 68.115, the permittee shall comply with the requirements of 40 CFR Part 68.

(40 CFR Part 68)

X. Changes to Permits for Emissions Trading

No permit revision shall be required under any federally approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit. (9 VAC 5-80-110 I)

Y. Emissions Trading

Where the trading of emissions increases and decreases within the permitted facility is to occur within the context of this permit and to the extent that the regulations provide for trading such increases and decreases without a case-by-case approval of each emissions trade:

> Page 30 of 30 July 25, 2005

- 1. All terms and conditions required under 9 VAC 5-80-110, except subsection N, shall be included to determine compliance.
- 2. The permit shield described in 9 VAC 5-80-140 shall extend to all terms and conditions that allow such increases and decreases in emissions.
- 3. The owner shall meet all applicable requirements including the requirements of 9 VAC 5-80-50 through 9 VAC 5-80-300.

(9 VAC 5-80-110 I)